

1. A method of assembling electric connector pins on a substrate (20) in the form of a board, consisting of inserting the pins (31) into individual housings (22) via a first face (20₁) of the substrate, the pins forming at least one comb-like alignment (31A, 31B) on the second face (20₂), arranging the solder on the second face of the substrate around the pins and heating the comb by means of a hot gaseous flow to achieve the soldering, characterized in that the gaseous flow is guided so that it passes at least partially between the pins (31) forming the comb (31A, 31B) from one side of the comb then, after it has passed through the comb, it is diverted away from the substrate.
2. The method as claimed in claim 1, characterized in that the incident gaseous flow initially perpendicular to the substrate is diverted by the latter before passing through the comb.
3. The method as claimed in claim 1 or 2, characterized in that the gaseous flow is diverted perpendicularly to the substrate after it has passed through the comb.
4. The method as claimed in one of the preceding claims, characterized in that the gaseous flow is guided by means of a hot gas nozzle (1) comprising at least one wall (2A, 2B; 102A) of a length adapted to the length of the comb (31A, 31B) and a deflector (3A, 3B; 103A) oriented parallel to a free edge of said wall and distant from the latter so as to divert the gaseous flow leaving the comb with a low pressure loss.

5. The method as claimed in the preceding claim, characterized in that the deflector (3a, 3B; 103A) of the nozzle is parallel to the wall.
- 5 6. The method as claimed in one of claims 4 and 5, characterized in that the wall (2A, 2B; 102A) is placed in line with the comb (31A, 31B) so that the majority of the incident gaseous flow is guided through the comb.
- 10 7. The method as claimed in one of the preceding claims, characterized in that the pins (31) are elements of connection between a control circuit board (20) and a power circuit board (10), the latter forming a heat sink.
- 15 8. A nozzle (1) for implementing the method as claimed in one of the preceding claims comprising a channel (2) for guiding a hot gaseous flow with at least a portion of rectilinear wall (2A, 2B) terminated by a free edge (2A', 2B'; 102A') and an external deflector (3A, 3B; 103A), parallel to the free edge.
- 20 25 9. The nozzle as claimed in claim 8 characterized in that the deflector also extends parallel to the wall (2A, 2B; 102A).
- 30 10. The nozzle as claimed in one of claims 8 and 9, characterized in that the cross section of passage of the gas between the free edge and the deflector is substantially equal to the cross section of passage of the gas in said channel (2).
- 35 11. The nozzle as claimed in one of claims 8 to 10, comprising at least a second wall with a second baffle for the soldering of pins forming two combs parallel to one another.